Standards and Requirements Identification Improvement Council (SRIIC)
January 31, 2002 Workshop Results

As a result of the DOE Executive Safety Conference held in Washington, DC, December 11-12, 2001, the Session 2 panel planned to conduct a workshop to assess our current situation with respect to standards and requirements identification and integrate the diversity of lessons learned across the complex into a shared vision for the future. In planning this workshop a council of senior managers was formed to accomplish this objective with representation from across the DOE/NNSA complex. Experts in standards/requirements identification from DOE/NNSA federal and contractor organizations were invited to attend and provide their technical and experienced perspective.

The subject workshop held at the Nevada Operations Office, Las Vegas, Nevada resulted in the sharing of information, experiences, and perspective. A number of lessons learned were identified and discussed. Pilot projects and some new initiatives were described. Needed improvements were offered and a model approach for the future envisioned. The attendee list is provided at attachment 1.

The workshop began with opening remarks by Kathy Carlson, Manager, Nevada Operations Office. Richard Black (EH-253) and Glen Podonsky (OA-1) provided perspective from their offices. These opening presentations were followed by breakout sessions consisting of representatives from the major program offices: Science, Environmental Management, and Defense Programs. Results of introductory briefings/discussions, the breakout sessions, and briefings on major pilots/initiatives are summarized below.

Lessons Learned

➢ Don't Fix What's Not Broken

The Laws and Directives Clause, DEAR 970.5204-2 (formerly 970-5204-78) subsection (c), states that ES&H requirements may be determined by a "DOE approved process … such as a tailoring process included in a DOE approved Safety Management System." There were some views expressed that any process approved by the DOE Manager as part of the site's Safety Management System is a "DOE approved process." An individual, who helped draft this DEAR clause, indicated that the intent was to require a necessary and sufficient process as described in DOE M 450.3-1. Some individuals indicated that the more liberal interpretation works well and has withstood external scrutiny and would not see a more strict interpretation as an improvement.

Lessons Learned

- ***Don't Fix What's Not Broken***
- ***DOE Requirements: "Outcomes and Results" versus "How To"***
- ***Right Size List Bs – Start With Consideration of DOE Directives***
- ***Maintenance of DOE Directives is Expensive***
- ***No Savings Without Staff Reductions/Redirections***
- ***Follow Defined Standards/ Requirements Identification Processes***
- ***Maintenance of Requirements Set is Essential***

- **DOE Requirements: "Outcomes and Results" versus "How To"**

There was majority agreement that DOE requirements should be performance driven - outcome/results oriented. This has been a major initiative with respect to performance-based management. However, it was pointed out that the Department performs many unique activities for which there is no industry analog and many have security missions that demand an extra measure of safety and reliability. Also, the Department's strong technical capabilities and lessons learned are often captured in DOE directives more quickly and effectively than can be accomplished through industry consensus standards, rule making, or other agency regulation changes. Additionally, there are federal regulations and stakeholders (e.g., OMB requirements and Congress) that demand information, which dictate the imposition of "how-to" like requirements to achieve consistent input.

- **Right Size List Bs – Start With Consideration of DOE Directives**

EH indicated that standards sets developed for contracts should first begin with consideration of DOE directives that are based on experience, contain embedded commercial standards, and developed through the DOE-wide consensus process. DOE directives may or may not be selected depending on the work to be performed. From this set, other standards and requirements should be added as necessary and sufficient. Based upon OA performance evaluations, OA recognizes the value in streamlining and reducing unnecessary or duplicative requirements, but cautions against developing "gaps" in requirements sets. OA expects to review the technical basis/justification that the requirements provide adequate protection for all hazards. This approach was noted as consistent with the field's approach to "defend what you do, not what you don't do." However, no such language is contained in DOE directives leaving the flexibility for assessors to demand otherwise. Also, EH indicated that List Bs should be evaluated to determine whether they contain standards that are more appropriate for facility/activity procedures rather than contract requirements.

- **Development and Implementation of DOE Directives Requires More Management Attention**

As EH indicated, DOE Directives are developed, in part, by using technical experts to comb the universe of standards and requirements, extract key safety expectations, and place in DOE Directives. EH admits this process suffers from the same experts repeatedly reviewing and commenting on the Directives and, with budget constraints, the directives are becoming more challenging to keep up-to-date with industry standards or best practices. It was pointed out, as an example, that the DOE Explosive Safety Manual or Electrical Safety Handbook has been coveted by workers who consider these documents to be much more user friendly than the corresponding voluminous collection of industry standards and requirements. Some do not see value in this service, and believe that the field should have the flexibility to tailor the industry standards as appropriate. Also, there is a tendency to use DOE guidance documents for checklist assessments. More management attention to development and implementation is required.

- **No Savings Without Staff Reductions/Redirections**

As managers, we must be able to justify our actions. Simply reducing the number of requirements is insufficient evidence of progress and improvement; we must be able to demonstrate staff reductions or non-value added work reductions where employees are redirected towards value added work. This requires a detailed understanding of the non-value added work and the resources required to accomplish the work. Once eliminated, management needs to quantify the personnel resources that are now performing value added work and any associated retraining impacts.

- **Follow Defined Standards/Requirements Identification Processes**

Managers should rigorously adhere to whatever "DOE Approved Process" is utilized for the definition of the standards/requirements set. Many are pressured by internal and external stakeholders to include specific DOE directives in applicable contracts without regard to necessity and sufficiency. While inclusion of DOE directives may be appropriate on a site-wide basis, some assessors tend to drive what they personally consider to be the right requirements from these directives to specific activities based on limited observation or knowledge of the work. In response, some field elements have unilaterally changed the contract requirements or the facility-specific set to appease the assessor. Managers need to be disciplined in configuration management to lessen "requirement creep." Likewise, once a set is agreed to, both parties should live up to the agreement; contractors should implement, and DOE should assess to the standards/requirements set.

- **Maintenance of Requirements Set is Essential**

Whatever agreed upon set of standards/requirements is developed, it must be maintained. Laws, regulations, DOE requirements, industry standards are ever evolving. Work and hazards are often dynamic. Life cycle transitions are inevitable. These are good reasons to strive for a simplistic standards set and a disciplined change control process. However, it is noted that over generalized citations invite more subjective interpretations.

Needed Improvements

Needed Improvements

- ***Develop Policy Language Regarding DOE Guides***
- ***Remove HQ Concurrence from the DOE M251.1-1A Exemption Process***
- ***Revise and Clarify DOE Functions, Responsibilities, Authorities, and Accountabilities***
- ***Don't Limit WSS to ES&H Requirements***
- ***Reengineer WSS process to be less cumbersome***

➢ Develop Policy Language Regarding DOE Guides

When is a Guide a guide and when is it an expectation. There were some views that DOE guides are akin to NRC Regulatory Guides, which place the burden of justifying deviations from the regulatory guide on the licensee; likewise, there are similar views that DOE contractors need to be able to justify their deviation from the guides to provide a comparable level of control. Others see a mix in that guides for DOE regulatory requirements, e.g., 10 CFR 830, do carry the same expectations as NRC Regulatory Guides, while other DOE guides are simply good practices to be shared. Still others consider guides to be just what is identified in DOE M 251.1-1A DIRECIVES SYSTEM MANUAL, in that they "…provide non-mandatory, supplemental information…" It was clear that more precise language in some DOE directive addressing this issue is needed.

➢ Remove HQ Concurrence from the DOE M 251.1-1A Exemption Process

There was discussion on the value of headquarters concurrences on exemptions considered necessary by the field offices. The exemption process defined in **DOE M 251.1-1A, Chapter 7** has been followed by numerous field elements with varying results ranging from timely and reasonable response to "a total failure, why try?" If field managers are accountable, then requesting an exemption concurrence by distant individuals who likely know very little about the actual field situation and have no accountability seems valueless. Instead of concurrence, HQ comments on the exemption are appropriate as input to the DOE approval authority.

➢ Revise and Clarify DOE Functions, Responsibilities, Authorities, and Accountabilities

This is the most challenging aspect of developing any management system; for it is here that the work gets personal. The existing culture insists that DOE review and approve all safety management programs since DOE is ultimately responsible for safety. With performance-based contracting, DOE may shift some of these responsibilities and accountabilities to contractors. Senior managers must take an active role in crafting or at least approving the text that will define their expectations. Further, these expectations must be communicated to the implementers and the culture change fostered.

- **Don't Limit WSS to ES&H Requirements**

There was some discussion on the limitation of the necessary and sufficient process to ES&H requirements currently included in DOE directives. Pilots have demonstrated that the application of the necessary and sufficient process to non-ES&H directives works just as well. There does not seem to be any rational basis for the limitation. The key is to ensure that all affected parties and stakeholders are engaged and involved in the process.

- **Reengineer WSS process to be less cumbersome**

The current DOE M 450.3, *Necessary and Sufficient Closure Manual*, is very robust and prescriptive and could benefit from a reengineering based upon lessons learned. If it is the intent of the Department to strengthen its requirements, this improvement would add value. However, if any "DOE approved process" is acceptable, then the document could be considered more of a guide and implemented in a more graded fashion.

Pilots and New Initiatives

Planned and New Initiatives

- ***Berkley Laboratory Principle Driven Contracting***
- ***ORNL/PNL External Regulation***
- ***DOE/EM Top to Bottom Review***
- ***KCP Order Reduction***
- ***DOE/RL Streamlining Requirements to Accelerate Closure at Hanford***
- ***Just In Time DSA – The Hanford Nuclear Safety Basis Strategy***
- ***Fernald Requirements Review***
- ***NNSA Self-Governance Model***

- **Berkley Laboratory Principle Driven Contracting**

This Department of Energy (DOE) pilot study addresses the management relationships within national laboratories that are critical to operational efficiency and effectiveness in conducting DOE's science mission. Chartered by the Undersecretary of Energy and the Laboratory Operations Board Best Practices Working Group, the study identifies and assesses best management practices for consideration by the Secretary of Energy Advisory Board (SEAB). The recommendations include practices that might be incorporated into the Management and Operation (M&O) contracts for the national laboratories.

The pilot study compared best practices at federally funded research and development centers (FFRDCs) with those at Lawrence Berkeley National Laboratory (LBNL). LBNL was selected for the pilot because it has a focused science mission, conducts no classified work, and does not require unique and specialized administrative systems like those associated with nuclear materials, weapons development, or experimental reactors. The National Science Foundation's (NSF's) National Center for Atmospheric Research (NCAR) and the National Aeronautics and Space Administration's (NASA's) Jet Propulsion Laboratory (JPL) were selected for comparison with LBNL.

Under the guidance of the DOE senior management charter, the study was conducted by a team of administrative and operational specialists from LBNL, the University of California's Office of the President, and DOE/SC's Berkeley Site Office (BSO). Data were gathered and analyzed from September through December 2001. This process included site visits, telephone interviews, and documentation from NCAR and JPL.

Best practices are those management, administrative, or operational activities that enhance the ability of the organization to achieve mission success in a cost-effective and efficient way while providing the necessary assurances to the federal government that the contractor is a responsible steward of the public resources entrusted to it. Two different types of best practices were identified: those characterized by the nature of the relationship between the federal agency and the contractor, and those essentially internal to the contractor organization. Best practices in both of these areas lead to increased cost-effectiveness. The extent to which external and internal administrative and operational requirements have been aligned largely determines the efficiency of these laboratory organizations.

One of the most important findings was that the relationship between the federal agency and the contractor determines the extent to which this alignment is achievable. Where the federal mission program manager has the authority and responsibility for setting Administrative and Operational (A&O) requirements, alignment is achieved because the cost-effectiveness and efficiency gains are in the program manager's best interest. Where additional A&O requirements are directed from other parts of the agency that are not responsible for mission success, misalignment can occur, leading to increased costs and other inefficiencies. Integration of mission and A&O requirements is fully achieved in the NSF–NCAR relationship, partially achieved through the NASA Management Office at JPL, and only minimally achieved in the DOE–LBNL relationship.

Despite some conflicts in the alignment between authority and responsibility in federal laboratory relationships, internal management continues to improve at the laboratories. Contractors using Performance-Based Management have undertaken streamlining, improved information systems, automated work processes, and modernized business practices. Innovative best practices of this type were identified at NCAR, JPL, and LBNL. However, further gains in cost-effectiveness and efficiency will depend on far better alignment of external and internal relationships.

Alignment to achieve best management practices requires changes in roles and responsibilities on the parts of both the federal agency and the laboratory contractor. Moreover, a strong focus on mission success, throughout both the federal agency and the contractor organization, is a prerequisite for achieving the needed alignment between A&O requirements that support the scientific mission and other agency-driven A&O requirements. The best management practices summarized below address the realignment needs.

1. Line Management Accountability. Increase the focus on mission success by integrating A&O requirements into mission priorities, and establish line accountability within the program organization of the federal agency and throughout the contractor organization.

2. National Standards. Encourage efficient and innovative support work by establishing performance criteria that are based on applicable national standards instead of agency-specific requirements.

3. Assurance Reviews by External Experts. Enhance assurance and credibility of laboratory stewardship by using nationally recognized experts for A&O performance reviews and compliance audits.

4. Bilateral Decision Process. Tailor implementation of agency directives by taking site-specific conditions into account through a bilateral management decision process.

5. Mission-Based Performance Measurement and Incentives. Drive improved mission success by performance-based management processes and by reward systems that are consistent with the laboratory's mission and culture.

6. Contract-Based Best Practices Laboratory Management. Embody these management principles in the FFRDC contract, defining the roles and responsibilities of agency and contractor personnel, behaviors, and performance expectations.

The report has been briefed to Mr. Card and his input has been incorporated. The report is final. The next event is a review of the report by the Working Group of the LOB. This is expected be completed by February 26, 2001. The report is on the Web at LBNL.GOV. The benefits (while not specifically costed) are in the report.

- **Pacific Northwest National Laboratory and Oak Ridge National Laboratory – External Regulation**

Battelle manages or co-managers three Office of Science national laboratories: Brookhaven National Laboratory (BNL), Oak Ridge National Laboratory (ORNL), and Pacific Northwest National Laboratory (PNNL). Battelle and its managing partners intend to discuss with DOE a transition to external regulation. Because of contract expiration dates, PNNL will be the first contract addressed.

Many aspects of the PNNL operation are already under external regulation. Battelle owns or leases approximately fifty percent of the Laboratory space, which is not located on the DOE Hanford site and is currently governed by external (e.g. state and local) requirements. Battelle's unique contractual relationship, with agreed to cost reimbursement rules, allows government work to be conducted in Battelle owned facilities, and Battelle private work to be conducted in government facilities. This has required Battelle to be able to administer to both DOE, federal, state, and local requirements. Therefore, transitioning to external requirements and external oversight by state and federal parties for all non-nuclear activities is the first priority at PNNL. In principle, this simply represents an extension of an existing regulatory framework. DOE nuclear facility-related work would continue to be conducted under applicable federal rules and monitored by cognizant DOE entities.

At BNL and ORNL the end point is intended to be the same, however, the transition will likely go through different processes and certainly a different schedule due to the fact there is no existing external regulatory framework/experience already in existence that can be leveraged. In general, in the first phase all non-nuclear activities would be conducted under federal, state, and local laws and monitored by the cognizant DOE entities. DOE nuclear/radiological activities would be conducted under applicable federal rules and monitored by the cognizant DOE entities. In the second phase, the transition would be made to external monitoring for all non-nuclear/non-radiological activities based on demonstrated success in meeting performance requirements and in DOE stewardship expectations through performance-based management. In addition, the demonstrated existence of a mature self-assessment program would be a key factor in determining the timing of such a transition. In parallel with the changes in the regulatory framework, other changes impacting the basic governance structure will be discussed with DOE. Key features of a modified governance structure would include:

- Performance requirements derived from federal or state laws incorporated "as is" by global reference in the contract without additions;
- All "how to" DOE Orders, Directives and guidance removed from the contract;
- Performance expectations not in federal or state laws will be addressed through the performance-based management process; and
- Stewardship of DOE assets assured by best industry practices and systems that are certified by independent experts.

The PNNL contract has been extended and a new contract will be negotiated and put into effect on October 1, 2002. Contracts for managing BNL and ORNL extend into FY03 and FY05 respectively.

In order to determine total cost savings of the proposed approach, the total regulatory structure on both the contractor- and DOE-side must be considered. In most cases, the systems deployed by the contractor to ensure safe and secure operations would remain in place regardless of whether operations are managed to DOE requirements or external requirements. However, it is likely that both DOE and the contractor would capture cost savings related to a reduction in overlapping oversight and in the costs associated with evaluating multiple sets of requirements to determine an appropriate tailored set of requirements.

DOE reaps substantial benefits because it no longer must maintain an expensive regulatory system of rules, orders, and guidelines, with corresponding oversight and compliance functions.

Many of the benefits of the proposed approach are related to clarifying expectations and allowing DOE to devote its efforts to support mission execution. Under the proposed model, the cognizant Program Secretarial Officer has direct line authority to the contractor. DOE site offices would support Headquarters offices/programs in mission accomplishment with fewer resources devoted to oversight. The site offices lead the performance-based management process with the contractor and evaluate contractor operational performance.

- **Environmental Management (EM) Top to Bottom Review**

In August 2001, the Assistant Secretary of Environmental Management tasked a team to conduct a programmatic review of the EM program and its management systems, with the goal of quickly and markedly improving program performance. The team's findings address, in part, the issue of standards and requirements. The team noted that the current framework and, in some cases, interpretation of DOE Orders and requirements, laws, and regulations, create obstacles to achieving cleanup that reduces risk to human health and the environment as quickly as possible. The team recommended that DOE initiate an effort to review current DOE Orders and requirements, as well as regulatory agreements, for their focus on risk reduction. This requirements review must also lead to the development of a streamlined process for interpreting DOE Orders and requirements (e.g. safety basis) during the cleanup process, i.e., the application of requirements should be consistent with the work at hand.

The team referenced the use of the commercial contract format developed by the contractor at Rocky Flats for decontamination and decommissioning (D&D) of Building 111. This process eliminated any reference to DOE orders in the statement of work by translating the DOE Order requirements into clear requirement statements. The effort attracted many non-traditional DOE contractors and successfully reduced D&D costs by 66 percent.

It is clear that significant cost savings and performance efficiency can be achieved by improving our requirements base and interpretation of requirements for the work being performed. At this point, EM-1 is evaluating the teams report and may include future milestones in this Standards and Requirements Identification Improvement initiative as appropriate.

- **KCP Order Reduction Project**

In 1994, the KCP and KCAO jointly embarked on an order compliance reduction process based on the industrial nature of KCP. After a pilot project focusing on environment, safety and health (ES&H) requirements, a transition plan was put in place by 1995 to recommend and implement proposals in 10 functional areas, based on DOE/contractor evaluation of the differences between industry standards and DOE Orders and other requirements. The ten functional areas included:

Administrative and Support Services,
Asset Management,
Emergency Management,
Environment, Safety and Health,
Financial Management,
Information Resource Management,
Purchasing,
Quality,
Safeguards and Security, and
Transportation and Packaging.

There were various levels of support within DOE for implementation in each of these functional areas. When KCAO approached AL and HQ for concurrence, HQ security personnel refused to talk about change to NISPOM Security Standards. EH was also hesitant. There are numerous examples of changes that were not supported for one reason or another, but when functional specific discussions were held, good agreement was reached.

The greatest success was gained from the ES&H and Emergency Management functional areas. (For example: Occurrence Reporting saved $49,000, Emergency Preparedness saved $215,000, and General Environmental (5 orders reduced) saved $443,774.) But the real advantage to DOE was that the contractor had to do some serious thinking about how they would replace DOE Orders. For example, what type of infrastructure, behavior changes, and documentation modifications would be required to achieve 'Best' in Industry.

During this time period the KCP was also implementing the following:

VPP (STAR status awarded in 1996)
ISO 9001 Quality Certification (certification occurred in 1995)
ISO 14001 ES&H Certification (certification received 1997)
ES&H Management Plan (completed 1998)
Command Media business system (1995-1996)
Culture of continuous improvement (Corporate driven - early nineties)

All of the above initiatives were being applied to the entire site. Six Sigma was being seriously implemented in the 1999 time period to supplement continuous improvement. Going through this process could better be described as a sitewide "Adoption of Best Practices" initiative, using both DOE Orders and Industrial Standards as the models.

Let's think about how DOE currently directs our contractors:

1) Formal: DOE Orders, Contract Requirements, and Contract Modifications.
2) DOE Assessments: Starting today for the next year, the KCP will be assessed by OA, NNSA HQs, AL and the KCAO. This is on top of a strong contractor self assessment program. We have only started to reduce the overall volume of assessments. One or two may have been combined (AL and KCAO for example, or maybe even NNSA, AL, and KCAO), but real reductions still remain to be seen. Each one of these assessments results in findings, and each assessment layer has their own individual sense of expectations. Each finding also results in a corrective action plan. And ALL are accepted by the contractor, because it is easier to comply than to argue with DOE. Low value implementation plans are written, repetitive annual documentation is created and maintained. Over time, the real reason for the original findings disappears, but not the workload. And on top of this we have legally required visits from our environmental regulators, and the potential impact of the DNFSB (who simply tells us that we are not doing what our own requirements say we should).
3) Informal requirements: These come in the form of letters, discussions, and emails from folks all over the DOE/NNSA. The KCAO is not privy to all of this information, so we can't even manage to track what is or is not responded to. These additional informal requirements range from Wildfire Protection Plans to Pollution Prevention Conferencing.

One improvement process that has been a major success at the KCP is the use of third party oversight. (The M&O and DOE concur on an expert firm to conduct focused, high value reviews). This was implemented as a direct result of applying industrial standards. These third party reviews are based on credible industrial standards with no other agendas. They are recognized experts in their respective fields and do their job well. DOE had a similar system in place for fire protection in the 90's (which stopped for some reason around 1997). Experts went around to all DOE sites on a scheduled basis and wrote a ONE PAGE report to HQ on the results. It was then up to line management to accept or reject the finding – but it gave both DOE and the contractor the opportunity to balance priorities and document the acceptance or rejection of the concept.

The KCP has benefited substantially from this "Order Reduction" project. The KCAO has reduced their FTE's from 78 to 56. The contractor has made similar reductions (such as a 60% reduction in ES&H staff since 1993) and acts in an accountable fashion. They have a culture of ownership, continuous improvement, and accountability. Recently, however, we have started noticing "order creep"- the agreements and understandings that were in place 6 years ago are disappearing. We are having a tough time explaining these changes in the system to new folks that do not seem to be interested in hearing about cost savings.

- **DOE/RL Streamlining Requirements to Accelerate Closure at Hanford**

Through a collaborative effort between DOE-RL and Fluor Hanford (FH), 34 DOE Directives have been removed from the Project Hanford Management Contract and 30 additional directives are slated to be evaluated by the end of the fiscal year. This effort removed requirements that did not apply, replaced 4-digit orders with 3-digit orders, clarified requirements to make applicability to FH work and implementation more easily understood, simplified definition of work scope and supported efforts to manage scope creep.

The Richland Operations Office's Integrated Management System (RIMS) and the requirements management process is simplifying transmittal of contractor requirements by employing supplemental Contractor Requirements Documents (CRDs) containing applicable requirements from the DOE directives and additional local requirements specific to the Hanford environment. The supplemental CRDs eliminated contractor analysis of the entire order and simplified compliance.

As a follow-on effort, FH has initiated the next step in the requirements reduction initiative entitled "Management System Realignment Project (MSRP)". This project will flow down the reduced requirements to the implementing procedures at the company and working level. This will be done by streamlining requirements in management system documentation, minimizing self-imposed requirements and enabling the elimination of low value work. In addition, floor-level walk downs and personnel interviews are identifying low value work procedures and pointing to areas of improvement in higher-level documents. The FH document structure is also being streamlined to eliminate intermediate and redundant procedures that add confusion and inefficiencies at the working level.

The goals of the MSRP are to reduce the approximate 650 company level policies and procedures to 325 by June 2002 and reduce the approximate 7500 lower level work procedures to 4500 by September 2003. To date FH has eliminated 15% of the company level documents, reduced seven Standards/Requirements Identification Documents (S/RIDs) to one with a 60% reduction in requirements and identified numerous efficiencies at the working level through two pilot reviews.

In summary, money is being saved by challenging new and revised requirements as they emerge, eliminating and/or combining redundant procedures and eliminating self-imposed requirements that drive low value work. The most significant money savings will be reached by driving these reductions and efficiencies down to working level procedure.

- **Just In Time DSA – The Hanford Nuclear Safety Basis Strategy**

The U.S. Department of Energy, Richland Operations Office (RL) is responsible for 30 hazard category 2 and 3 nuclear facilities that are operated by its prime contractors, Fluor Hanford, Incorporated (FHI), Bechtel Hanford, Incorporated (BHI) and Pacific Northwest National Laboratory (PNNL). The publication of Title 10, Code of Federal Regulations, Part 830, Subpart B, *Safety Basis Requirements* (the Rule) in January 2001 imposed the requirement that the Documented Safety Analyses (DSA) for these facilities be reviewed against the requirements of the Rule. Only 6 of the 30 hazard category 2 and 3 nuclear facilities have safety basis documentation that is compliant with the Rule. In every case, however, the existing DSAs for these facilities adequately identified the hazards and corresponding controls required to ensure that the facility could continue to operate safely under its safety basis. The amount of valuable technical resources that would be required to prepare 24 new DSAs by April 2003 is prohibitive and threatens to delay critical risk reduction work.

RL and its prime contractors have developed a Nuclear Safety Strategy that provides a comprehensive approach for supporting RL's efforts to meet its long-term objectives for hazard category 2 and 3 facilities while also meeting the requirements of the Rule. This approach will result in a reduction of the total number of safety basis documents that must be developed and maintained to support the remaining mission and closure of the Hanford Site and ensure that the documentation that must be developed will support:

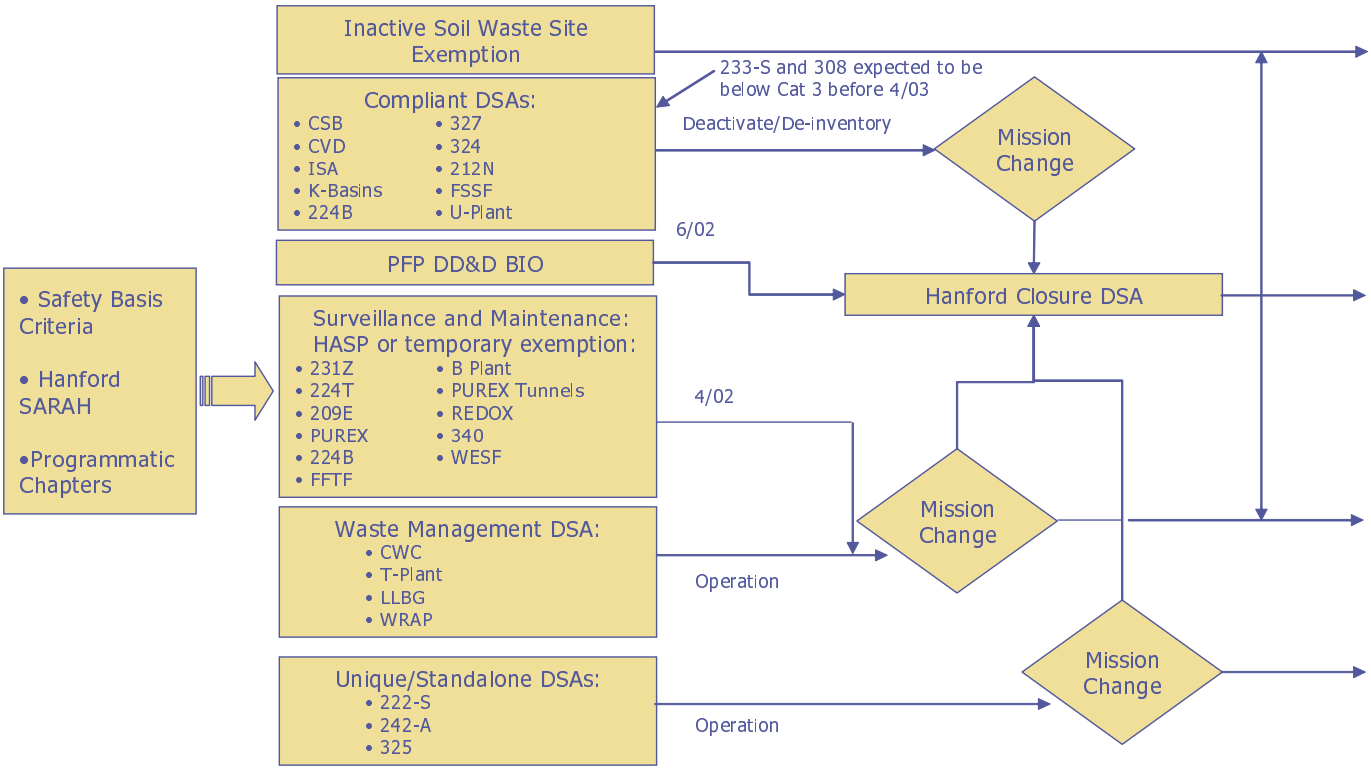
- Compliance with the Rule
- A "Just-In-Time" approach to development of Rule-compliant safety bases supported by temporary exemptions
- Consolidation of safety basis documents that support multiple facilities with a common mission (e.g. decontamination, decommissioning and demolition [DD&D], waste management, surveillance and maintenance).

This strategy provides a clear path to transition the safety bases for the various Hanford facilities from support of operation and stabilization missions through DD&D to accelerate closure. This

"Just-In-Time" Strategy can also be tailored for other DOE Sites, creating the potential for large cost savings and schedule reductions throughout the DOE complex.

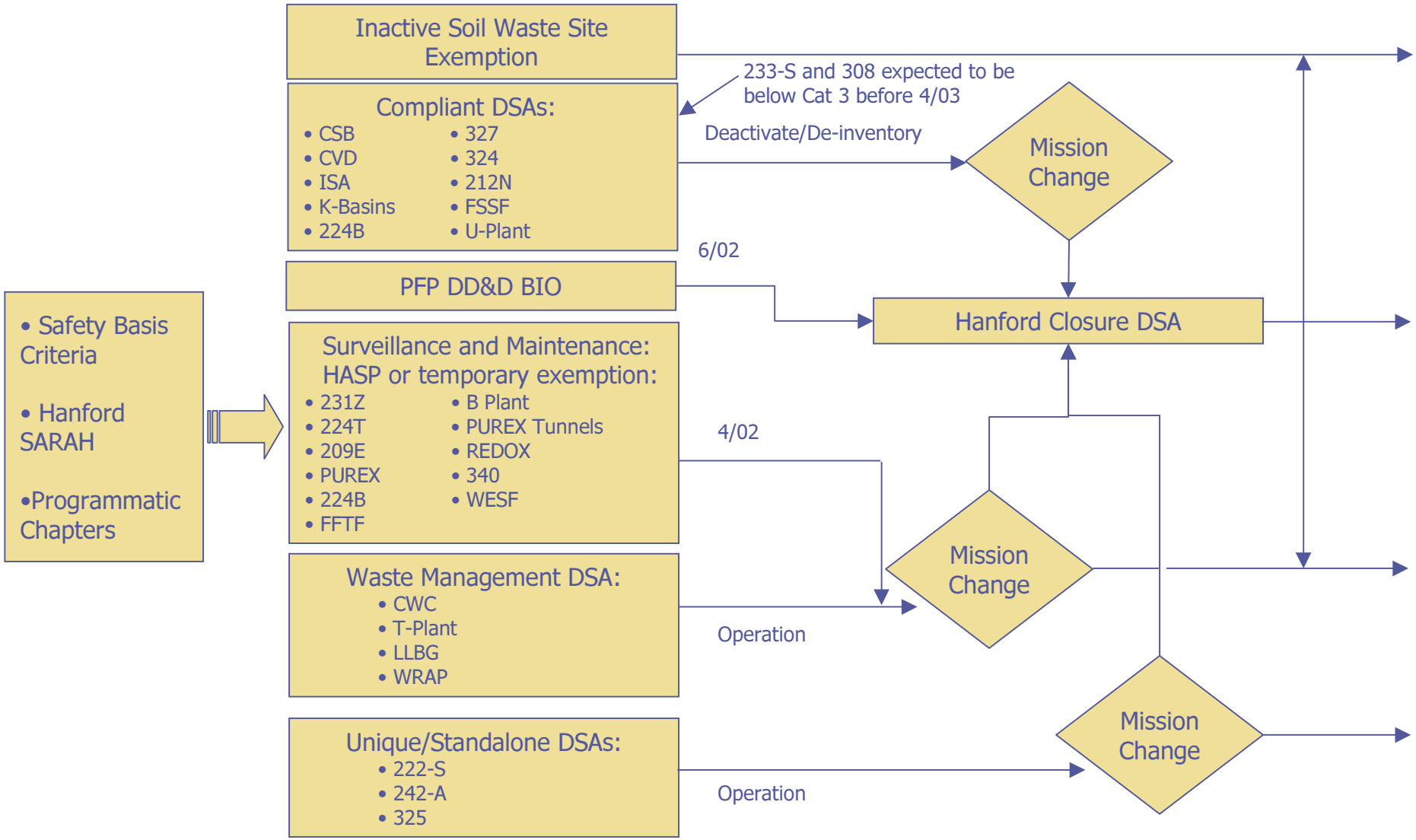
This initiative will utilize criteria documents that will streamline DSA preparation. These include a Model DD&D DSA, a Model Surveillance & Maintenance HASP that meets the DOE Standard 1120 safe harbor, a Model Waste Management DSA, and the Hanford Safety Analysis and Risk Assessment Handbook (SARAH). All of this will be done by April 03.

Fig. 1 RL Just-In-Time DSA Strategy To Support Accelerated Closure



➢ **Fernald Requirements Review**

On August 3, 2001, a meeting with senior management of the Ohio Field Office and the Office of Environment, Safety and Health was conducted to discuss opportunities to evaluate requirements under the Fernald Closure Contract and eliminate requirements that were not supportive of the closure site mission. Based upon this meeting, a pilot project was established


Inactive Soil Waste Site Exemption
233-S and 308 expected to be below Cat 3 before 4/03
Compliant DSAs:
• CSB
• CVD
• ISA
• K-Basins
• 224B
• 327
• 324
• 212N
• FSSF
• U-Plant
Deactivate/De-inventory
Mission Change
6/02
PFP DD&D BIO
Hanford Closure DSA
• Safety Basis Criteria
• Hanford SARAH
•Programmatic Chapters
Surveillance and Maintenance:
HASP or temporary exemption:
• 231Z
• 224T
• 209E
• PUREX
• 224B
• FFTF
• B Plant
• PUREX Tunnels
• REDOX
• 340
• WESF
4/02
Mission Change
Waste Management DSA:
• CWC
• T-Plant
• LLBG
• WRAP
Operation
Unique/Standalone DSAs:
• 222-S
• 242-A
• 325
Operation
Mission Change

to review sixteen Directives to determine whether the included 543 requirements were applicable to the closure actions.

In November 2001, the joint DOE-FEMP, DOE-EH and contractor review expedited elimination of non-value added requirements and ensured DOE-HQ was on-board with the requirement reductions. DOE-EH provided the assurance that elimination of non-value requirements made sense for a closure site. These were not formal exemptions, but HQ buy-in was important. The OH/EH review identified 152 duplicative requirements that could be eliminated from the contract. The following milestones are identified:

- Contractor to take action on 201 opportunities to further tailor implementation, June 30, 2002
- Fernald Environmental Management Project, Ohio Field Office and contractor to eliminate 152 duplicative requirements from the contract, Completed January 22, 2002
- EH/EM to initiate revision of directives for proposed five policy issues, To Be Completed in parallel with Hopf Initiative
- Contractor to submit two 10 CFR 835 exemption requests, Completed February 2002

The benefits from the removal of these duplicative requirements are not readily quantifiable. However, costs savings are expected in the following areas:

- Elimination of procedure and manual updates for duplicative requirements.
- Tailoring of site programs to ensure only those requirements necessary for safe implementation of environmental restoration efforts are implemented.

These cost savings will be applied to additional environmental restoration work activities.

➢ NNSA Self-Governance Model

The NNSA governance pilot is intended to develop a governance system for the laboratory that enhances our contribution to the national security mission of the NNSA. It is based on the application of the best of commercial standards and industrial practices and will implement an approach for assurance that emphasizes excellence in mission performance and utilizes recognized national experts coupled with independent assessments and audits. We will complete the development phase of the governance pilot April 30, 2002, which will include the full development of an assurance approach, the implementation of an Enterprise risk management system and the system of policies and procedures required for implementation. Commensurate with this date we will modify the existing Sandia contract to reflect the changes in governance being proposed. By October 30, 2002 we will have implemented the governance system for 6 months and have made a determination as to the specific aspects of the model that will be implemented at other NNSA facilities.

Model Approach

There was limited time in the workshop to develop a model approach. This accomplishment will be achieved in follow-up meetings of the SRIIC. However, some key principles that should drive our approach development were captured as indicated below.

- Remove the nuclear bias
- Apply commercial standards
- Contractor prioritization of self assessments
- External review by experts
- OA/HQ/Field – integrated validations that sample contractor and field office self assessments and processes

Path Forward

The SRIIC membership was pared down to the following individuals that will represent the breadth of the DOE/NNSA.

- Kathy Carlson — Chairperson
- Rick Jones/Richard Black — DOE/EH
- Charlie Billups — DOE/SC
- Joe Arango — DOE/EM
- Richard Crowe — NNSA/DP
- Ray Corey — OAK (field DP)
- Richard Nolan — OAK (field SC)
- Shirly Olinger — RL (field EM)
- Maggie Sturdivant — HQ/ Ex Officio
- Anne Troy — HQ/GC Ex Officio
- Michael Marelli — NNSA/NV (Executive Secretary)

Action Items	Champion	Due Date
Upload SRIIC 1/31 Workshop results to Executive Safety Conference Web page	Marelli	2/19/02
SRIIC to develop path forward	Carlson/Parker	3/02
SRIIC presentation at ISM Annual Conference breakout session	Carlson/Parker	5/02

Discussion Topics to be Referred to Other Session Chairpersons

Oversight needs to also examine what is too much

Assessments should be integrated to avoid layering

Oversight needs to be consistent with contract requirements

Metrics should drive focus for assessment planning. INPO is a good example

Develop a Criticality Incredible Definition/Approach.

Delegate DOE Standard 1120 Approval to Contractor. While this approach was desirable, it was clear that a rule change would be necessary and considered unlikely at this time.

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